Amendments to the Claims:

The text of all pending claims, (including withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (canceled), (withdrawn), (new), (previously presented), or (not entered).

Applicants reserve the right to pursue any canceled claims at a later date.

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-10 (canceled).

11. (currently amended) A method for determining wear and tear in machines comprising:

determining an electrical draw comprising at least one of a voltage draw or a current draw of a first subsystem of a machine during its operation; ~~and~~

determining wear and tear present in a second machine subsystem based on the determined draw in the first subsystem; and

inferring a material type or a material quality of a material being processed via the determined electrical draw.

12. (previously presented) The method according to Claim 11, wherein the draw determining step comprises, determining the draw on a drive of the machine, and the wear determining step comprises, inferring the wear and tear in a unit of the second subsystem driven by the drive based on the determined draw of the drive.

13. (previously presented) The method according to Claim 12, wherein the determining step comprises, determining the draw on the drive of the first subsystem which is rigidly coupled via a transmitter comprising, at least one of a force transmitter or a torque transmitter, with the drive unit of the second subsystem.

14. (previously presented) The method according to Claim 12, wherein the draw determining step comprises, sampling at least one of a current or voltage signal of the machine with a frequency of between approx. 5 and approx. 20 kHz.

15. (previously presented) The method according to Claim 12, wherein the draw determining step comprises, determining at least one of instantaneous values, average values or a frequency spectrum of the signal of the first subsystem of the machine.

16. (previously presented) The method according to Claim 12, further comprising,
acquiring further operating data about the first subsystem;
determining the wear and tear in the second subsystem; and
validating the data from the draw-determining step.

17. (previously presented) The method according to Claim 16, operating data acquiring step, further comprising, acquiring at least one of the load state, the speed, an operating temperature or an operating pressure.

18. (canceled)

19. (currently amended) A method for determining the operational effects in an industrial power plant machine system having a plurality of interconnected systems, the method comprising:

determining an electrical draw comprising at least one of a voltage draw or a current draw of a first subsystem of the machine system during its operation; ~~and~~

determining operational effects in a second subsystem in the machine based on the determined draw in the first subsystem; and

inferring a material type or a material quality of a material being processed via the determined electrical draw.

20. (currently amended) ~~A~~ The method for determining operational effects according to Claim 19, wherein the determining step comprises, inferring wear and tear in the second subsystem in the machine based on the determined voltage draw or current draw in the interconnected first subsystem.

21. (previously presented) The method according to Claim 20, wherein the draw determining step comprises, determining the draw on a drive of the machine, and the inferring step comprises, inferring the wear and tear in a unit of the second subsystem driven by the drive from determined draw of the drive.

22. (previously presented) The method according to Claim 21, wherein the draw determining step comprises, determining the draw on the drive of the machine of the first subsystem which is rigidly coupled in a rotationally stiff manner via a transmitter comprising, at least one of a force transmitter or a torque transmitter, with the drive unit of the second subsystem.

23. (previously presented) The method according to Claim 20, wherein the draw determining step comprises, sampling at least one of a current or voltage signal of the machine with a frequency of between approx. 5 and approx. 20 kHz.

24. (previously presented) The method according to Claim 21, wherein the draw determining step comprises, determining at least one of instantaneous values, average values or a frequency spectrum of the signal of the first subsystem of the machine.

25. (previously presented) The method according to Claim 20, further comprising,
acquiring further operating data about the first subsystem;
determining the wear and tear in the second subsystem; and
validating the data from the draw-determining step.

26. (previously presented) The method according to Claim 25, acquiring operating data step comprising, at least one of the load state, the speed, an operating temperature or an operating pressure.

27. (canceled)

28. (currently amended) A coal grinding machine comprising:

a drive;

a coal grinding mill driven by the drive;

a determining device ~~comprising means for determining~~that determines an electrical draw of at least one of a current or voltage draw of the drive during operation in communication with the drive; ~~and~~

~~a~~ an inferring device ~~comprising means for inferring~~that infers wear and tear present in the coal grinding mill on the basis of electrical draw determined in the drive; and

a further inferring device that infers a material type or a material quality of a material being processed via the determined electrical draw.

29. (previously presented) The coal grinding machine according to Claim 28, wherein the drive comprises a squirrel cage motor; and

the machine further comprises,

a shaft rigidly coupled with the motor and the coal grinding mill in a rotationally stiff manner without interposed elastic elements.

30. (previously presented) The coal grinding machined according to Claim 29, wherein the shaft comprises, a transmitter comprising at least one of a force transmitter or a torque transmitter, rigidly coupling the motor and coal grinding mill.

31. (previously presented) The coal grinding machine according to Claim 29,

wherein the goal grinding mill comprises a grinding ball;

wherein the draw-determining device comprises, means for determining marked changes in the frequency spectrum of the at least one of a current or voltage draw of the motor during operation; and

wherein the wear-and-tear inferring device comprises, means for inferring grinding ball wear in the coal grinding mill if marked changes in the frequency spectrum of at least one of the current signal or voltage signal are determined at characteristic frequencies.

32. (previously presented) The coal grinding machine according to Claim 28, wherein the draw determining device further comprises, means for determining the frequency spectrum and average values and time signals in the drive, and

wherein the wear-inferring device further comprises, means for inferring wear in the coal grinding mill from trends in the frequency spectrum and in the variation in the average values and time signals determined by the draw determining device.

33. (previously presented) The coal grinding machine according to Claim 28, further comprising, means for deducing the current state of the coal grinding mill based on predetermined current states determined by the draw-determining device.

34. (canceled)

35. (canceled)

36. (previously presented) The coal grinding machine according to Claim 29, wherein the draw determining device comprises, a signal processing unit mounted directly on and in electrical connection with the motor of the drive.